

REMARKS

In response to the outstanding Office Action, Paper No./Mail Date 092605, dated September 29, 2005, Applicant has carefully studied the references cited by the Examiner and the Examiner's comments relative thereto.

Claims 1, 2, and 4 have been amended.

New Claims 15-20 have been added.

Claims 1-20 remain in the application for consideration by the Examiner.

The specification has been amended for clarity.

No new matter has been added.

Reconsideration of the application, as amended, is respectfully requested.

A Petition for One Month Extension of Time is submitted herewith.

35 U.S.C. § 102(b)

The Examiner rejected Claims 1-2, 4-10, and 12-14 as being anticipated under 35 U.S.C. § 102(b) by U.S. Patent No. 5,784,853 to Hood et al. for THERMALLY INSULATING MULTIPANE GLAZING STRUCTURE. The Examiner stated:

“Hood et al (sic) shows an impact resistant glass structure comprising a generally planar glass first layer (12) having an outer edge, a generally planar impact resistant plastic second layer (16) spaced from and substantially parallel with the first layer, the second layer having an outer edge, a generally planar laminated glass third layer (18)...”.

Claim 1 of the application as amended reads as follows:

An impact resistant glass structure comprising:

a generally planar glass first layer having an outer edge;

a generally planar impact resistant plastic second layer spaced from and substantially parallel with said first layer, said second layer having an outer edge;

a generally planar glass third layer with a laminate film disposed on a surface thereof spaced from and substantially parallel with said first layer and said second layer, said third layer having an outer edge;

a first spacer disposed between said first layer and said second layer adjacent the respective outer edges thereof; and

a second spacer disposed between said second layer and said third layer adjacent the respective outer edges thereof, wherein the outer edge of said first layer, the outer edge of said second layer, and the outer edge of said third layer are adapted to be disposed in a window casing.

Claim 1 recites in part, “a generally planar glass third layer with a laminate film disposed on a surface thereof...”. Hood et al. discloses the use of “outer glazing sheets... of a special nature. e.g. laminated...” [Col. 4, lines 34-35]. However, laminated glass is not glass with a laminate film disposed on a surface. Laminated glass is a term of art in the glazing industry and defined in Webster’s Online Dictionary (available at: <http://www.websters-online-dictionary.org>) as “glass made with plates of plastic or resin or other material **between** two sheets of glass to prevent shattering” (emphasis added). Paragraph 11 of the specification of the instant application discloses a glass layer with a laminate film on one or more surface as well as laminated glass as defined above. The drawing Figure as originally filed also discloses the glass layer with a laminate film. Hood et al. does not anticipate Claim 1 because Hood et al. does not disclose a glass layer with a laminate film on a surface thereof. Accordingly, Claim 1 is patentable over Hood et al.

Since Claim 1 is deemed patentable, Claims 2, 4-10 and 12-14 which depend directly or indirectly therefrom, are not anticipated under 35 U.S.C. § 102(b) by Hood et al. and are patentable.

The Examiner also rejected Claims 1-2, 4-5, 7-8, 10-11, and 13-14 as being anticipated under 35 U.S.C. § 102(b) by U.S. Patent No. 6,108,999 to Smith et al. for WINDOW AND GLAZING FOR A WINDOW. More specifically, the Examiner stated:

“Smith et al (sic) shows an impact resistant glass structure comprising a generally planar glass first layer (3) having an outer edge, a generally planar impact resist plastic second layer (5) spaced from and substantially parallel with the first layer, the second layer having an outer edge, a generally planar laminated glass third layer (4)...”.

Claim 1 recites in part “a generally planar glass third layer with a laminate film disposed on a surface thereof...”. Smith et al. discloses the use of “laminated glass sheets to enhance bullet-resistance properties of the glazing.” [Col. 3, lines 51-56]. For the same reasons listed above for Hood et al., Smith et al. does not anticipate Claim 1 under 35 U.S.C. § 102(b) and is patentable.

Since Claim 1 is patentable, Claims 2, 4-5, 7-8, 10-11, and 13-14 which depend directly or indirectly therefrom, are not anticipated under 35 U.S.C. § 102(b) by Smith et al. and are patentable.

For the reasons stated above, Hood et al. and Smith et al. do not anticipate the Applicants' invention. Accordingly, reconsideration of the rejection of Claims 1-2, 4-11, and 13-14 under 35 U.S.C. § 102(b) is respectfully requested.

35 U.S.C. § 103(a)

The Examiner rejected Claim 3 as being obvious over Hood further in view of U.S. Patent No. 6,286,288 to France under 35 U.S.C. § 103(a). The Examiner also rejected Claim 11 over Hood et al. further in view of Smith et al.

As discussed above, Claim 1 is patentable over Hood et al. Therefore, Claims 3 and 11 which depend therefrom are patentable over Hood et al.

Accordingly, withdrawal of the rejections under 35 U.S.C. §103(a) is respectfully requested.

NEW CLAIMS

New Claims 15-20 have been added to claim subject matter Applicants are entitled to claim.

Claim 18 recites in part:

a first sealant disposed between said first layer and said second layer, and between said second layer and said third layer adjacent the respective outer edges thereof; and

a second sealant disposed between at least said first layer and said third layer adjacent the respective outer edges thereof, wherein said first sealant and said second sealant form a vapor barrier between at least one of a space formed between said first layer and said second layer and the atmosphere and a space formed between said second layer and said third layer and the atmosphere.

None of the references cited disclose a first and second sealant that provide for a vapor barrier between the interstitial spaces between the first and second layers, and the second and third layers. Nor do the references disclose a first and second sealant that hold the spacers in place to militate against separation of the first, second, and third layers.

The specification of the instant application discloses that a "first sealant layer 28 and the second sealant layer 30 hold the spacers 24, 26 in place and also provide a **vapor barrier** between the interstitial space between the layers 12, 14, 16, and the atmosphere" [emphasis added, para. 13, sentence 5]. Hood et al. discloses "spacing devices 6 have one side facing the interior space between the plastic sheet 5 and the two panes 3 and 4 which is partially open,

coupled by a membrane permeable to moisture, or perforated.” [Col. 3, lines 5-10]. Applicants disclose spacers and sealants that provide a vapor barrier to militate against air and moisture from compromising the space between the layers.

Claim 19 recites in part:

a first space formed between said first layer and said second layer and a second space formed between said second layer and third layer and communication between the first space and the second space is militated against.

For the reasons stated above, the cited references do not disclose a first space and a second space formed between said second layer and third layer and communication between the first space and the second space is militated against. The specification of the instant application discloses that “...the space between each of the layers 12, 14, 16 is filled with a gas... to militate against a for or condensate forming on a surface of the layers 12, 14, 16.” [para. 9, sentence 7] and that the “...glass structure 10 provides a thermal insulating structure, as well as an impact resistance structure. In the event a projectile is caused to impact the glass structure 10, the second layer 14 and the third layer 16 militate against a shattering and a complete failure of the glass structure 10...” [para. 14, sentences 1-2]. Accordingly, the application discloses a glazing with a space between the first and second layers and a space between the second and third layers. The first and second spaces do not communicate with one another in order to prevent “a complete failure” in the event of a layer being shattered.

The other references cited by the Examiner, but not applied, have been studied and are not considered to be any more pertinent than the references relied upon by the Examiner.

In view of the amendments to the claims and the above arguments, the Applicants believe that the claims of record now define patentable subject matter over the art of record. Accordingly, an early Notice of Allowance is respectfully requested.

While the Applicants’ attorney has made a sincere effort to properly define Applicants’ invention and to distinguish the same from the prior art, should the Examiner deem that other language would be more appropriate, it is requested that a telephone interview be had with the Applicants’ attorney in a sincere effort to expedite the prosecution of the application.